Leucospilapteryx omissella (Stainton) and *Coleophora artemisicolella* Bruand (Lep.: Gracillariidae and Coleophoridae) in Berkshire

On 16 September 1997, while searching plants of mugwort *Artemisia vulgaris* growing beside the River Lodden at Lower Earley for larvae of *Leucospilapteryx omissella* (Stt.), I noticed the characteristic feeding holes left by larvae of *Coleophora artemisicolella* Bru. in the mugwort seeds. Although larvae of this coleophorid are hard to find, due to their habit of using seed capsule as their larval case, careful searching soon revealed them in some numbers. At present they are overwintering in nylon mesh bags on a south-west facing fence, where they will remain until I bring them in during late May or June 1998. This species is not mapped for VC 22 in MBGBI (III).

At the same time as finding the coleophorid larvae I also found larvae of *L. omissella* in some numbers on the same plants. Their characteristic purplish inflated mines in the mugwort leaves were very obvious, as were the scarlet larvae that vacated them within a few days. I have looked for these larvae in and around this area, and indeed on plants in this very spot, each year for several seasons before, without success. It is a species notorious for having years of abundance followed by years of almost complete absence. Considering I had "just popped out for a stroll" this turned out to be a productive afternoon.

As a foot-note I must add that one active case of *C. artemisicolella* was found attached to a piece of dead wood collected during a field meeting at Burnham Beeches in Berkshire on 18 October 1997. This moth does not appear to be mapped for this vice-county either (Burnham Beeches is in VC24).– I. SIMS, 2 The Delph, Lower Earley, Reading, Berkshire.

Colonisation of north Scotland by *Bombus lapidarius* (L.) (Hym.: Apidae)

The bumblebee *Bombus lapidarius* (L.) has not been been recorded frequently in the north of Scotland. The *Atlas of the Bumblebees of the British Isles* (ITE 1983) shows no records for Highland or Grampian Regions since 1960, and I did not find it in Highland from 1988-1995 inclusive. My first record in Highland Region was in 1996, and I alerted local naturalists to submit records to me. This continued in 1997. Some records came from competent naturalists not specialist in *Bombus*, but who were given a clear description of *lapidarius*. In some cases no critical distinction was made from the similarly coloured *B. ruderarius* (Müller), also essentially absent from Highland region, and not recorded by me in Scotland other than on the islands of Coll and Tiree (where *lapidarius* also occurs). In other cases (asterisked below) I made a positive determination of *lapidarius*. I have assumed that all records of black, red-tailed bees are of that species.

In 1996, queens were present at Strathpeffer, Culbokie and Inverness (NH45*, 66 and 64) during May and June. This coincided at Strathpeffer with the presence of three queen *B. terrestris* (L.), a species which is sporadic and irregular in its appearance this far north. In summer 1996, males and/or workers of *lapidarius* were active at Inverness, Portmahomack and Tarbat Ness (NH64*, 98*). In May and June 1997, queens were again found at Knockfarrel, Fodderty, Dingwall, Inverness, Culbokie, Culloden, Rosemarkie and Portmahomack (NH45, 55*, 64, 66, 74, 75, 98). From May to August workers and/or males were found in NH45*, 54, 55*, 66*, 76, 85, 87, and 98 (localities listed above, plus Hilton of Cadboll, Kilcoy Castle, Nairn and Cromarty). In contrast, I have no evidence that *terrestris* bred in the area in 1996, or indeed in any year since 1988, despite the sporadic appearance of queens in spring, summer and autumn, and I saw no queens in spring 1997.

B. lapidarius has clearly recently moved into the Highlands, and expanded its range significantly either as autumn queens at the end of the very hot, dry summer of 1995, or as overwintered queens in the following spring. Some of these bred successfully, and queens over-wintered to emerge in 1997. Records from Annie Lamb and Laura Smith (*pers. comms.*) show that *lapidarius* has been present in Grampian Region since at least 1990 (records for NJ92, 82, 90, NO59, and breeding in NJ54, NK02). I have breeding records from Maryculter (NJ80) in 1990 and Braemar (NO19) in 1996. Since the Atlas does not record the species north of the Tay except for some pre-1960 records on the west and north coasts, it seems that over the past 20 years or so since the Atlas recording was done, *lapidarius* has spread significantly up the east coast of Scotland and is now well established in Grampian and Highland Regions. It remains to be seen whether the recent colonisation of Highland Region can be maintained in the long term.– MURDO A. MACDONALD, Dingwall Academy, Dingwall, Ross & Cromarty IV15 9LT.

Rearing *Nemapogon wolffiella* (Karsholf & Nielsen) (Lep.: Tineidae)

Larvae of the scarce tineid *Nemapogon wolffiella* were found during a field meeting at Warberg Reserve, Bix Bottom, Oxfordshire on 3 May 1997. John Langmaid suggested that a search be made for it, as it had recently been reared in some numbers in Devon. Here Mr Heckford had discovered larvae feeding in the fungus *Hypoxylon multiforme* earlier in the year (*Ent. Gaz.*,**48**: 193-194. 1997). *H. multiforme* grows on dead branches and trunks of silver birch that have either been lying on the ground or stacked for a while (years). It has the appearance of small black/brown pustules, roughly round in shape and anything up to 1cm in diameter. At this time of the year (April/May) these growths are very hard and dry in texture. This is a material with a singularly unappetising appearance which has probably been overlooked in the past as a diet for tineids. Externally, tenanted material had little of any sign or the larvae within, although small grains of dry black frass were evident on close inspection of a few examples. Subsequent examination showed that the larvae were also mining the dead birch wood beneath and around infected fungal material.

Several lepidopterists spent some time examining this fungal material in the field for larvae. I collected samples of fungal infected birch twigs and branches, although I could see no evidence of larvae. These were kept in Perspex fishtanks indoors, and on 15 June 1997 adults of this species began to emerge. A total of four individuals emerged by 28 June 1997. Their pupal exuviae were seen projecting from both fungal material and dead wood proximal to the fungal fruiting bodies.